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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,990	02/04/2002	James J. Kobe	57148U/S002	4190
32692	7590	10/31/2003	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY			VO. HAI	
PO BOX 33427			ART UNIT	PAPER NUMBER
ST. PAUL, MN 55133-3427			1771	

DATE MAILED: 10/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/066,990	<b>Applicant(s)</b> KOBE ET AL.	
	<b>Examiner</b> Hai Vo	<b>Art Unit</b> 1771	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-15 and 23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-15 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

1. The indicated allowability of claim 4 is withdrawn and should be included in the art rejections over Gehlsen in view of Parsons.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 4-12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gehlsen et al (US 6,103,152) in view of Parsons et al (US 5,851,663). Gehlsen teaches an adhesive foam tape having every element set out in the claims except an antimony-free fire retardant (Hot melt composition 1, examples 1-5). Gehlsen teaches the adhesive layer formulated without fire retardant and disposed on at least one surface of the foam layer sheet (column 14, lines 45-60). Parsons teaches an adhesive foam tape comprising an antimony-free flameproofing agent such as ammonium polyphosphate (column 3, lines 1-12, and 58-60). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ an antimony-free fire retardant in the foam layer motivated by the desire to achieve a flameproofing effect and environmental safety.

With regard to claim 2, Gehlsen teaches the adhesive tape having a split strength, a peel adhesion on stainless steel and a static shear strength within the claimed ranges (abstract and table 1).

With regard to claims 6 and 12, Gehlsen discloses the adhesive tape having a thickness greater than 1 mm (column 14, line 23). Since the thickness parameter is recognized as a result-effective variable, differences in thickness will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such particle size is critical or provides unexpected results. Varying the thickness of the foam tape would have been recognized by one skilled in the art to impart the strength of the foam layer and as well as to improve the adhesion of the foam layer and the adhesive layer. This is in line with *In re Aller*, 105 USPQ 233 which holds that discovering the optimum or workable ranges involves only routine skill in the art.

With regard to claim 9, it appears that Parsons and Applicants are using the same material for an antimony-free intumescent fire retardant which is available under the trade name EXOLIT IFR-23 (Parsons, column 2, lines 60-65 vs. Applicants' specification, page 11, line 18-19). Applicants state that intumescent fire retardants generally comprise an acid source, a char former and a blowing agent (Applicants specification, page 4, lines 17-19). It is not seen that the intumescent fire retardant of Parsons would have a composition different from Applicants' intumescent fire retardant.

With regard to claim 12, Parsons discloses an antimony-free flameproofing agent having been added to the adhesive in the amount of from 25 to 75 weight percent (column 3, line 21), meeting the specific range required by the claims. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the flame retardant agent having an amount instantly claimed motivated by the desire to achieve an optimum flameproofing effect.

With regard to claims 10 and 11, Gehlsen does not specifically disclose the flame retardant synergists in the foam sheet. Parsons teaches a foamed adhesive composition comprising the flame retardant synergists (column 2, lines 61-65). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the flame retardant synergists in the foam sheet, motivated by the desire to obtain a reduction in the tendency to produce burning drips during combustion.

With regard to claim 15, since the article of Gehlsen modified by Parsons is structurally the same and made from the same materials as that of the present invention, it is the examiner's position that the article of Gehlsen modified by Parsons would inherently pass one of the tests as set forth in the claims.

4. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gehlsen et al (US 6,103,152) in view of Parsons et al (US 5,851,663) as applied to claim 1 above, further in view of Bonk et al (US 4,751,269). The

combination of Gehlsen and Parsons fails to teach microfibers in an adhesive layer. Bonk teaches an adhesive composition comprising microfibers as a reinforcing filler (column 6, lines 1-5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ microfibers in the adhesive layer motivated by the desire to increase strength and flexibility of the flame-retardant article.

5. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gehlsen et al (US 6,103,152) in view of Parsons et al (US 5,851,663) as evidenced by Mochizuki et al (US 6,139,998). See discussion in the paragraph no. 3. Parsons teaches the composition comprising a combination of non-halogen intumescent flame retardant (NHIFR) with a brominated additive to provide a synergistic effect in flammability performance of the composition (column 2, lines 35-40, and 50-54). It is known in the art that tris(bromoneopentyl) phosphate is a bromonated fire retardant (see Mochizuki, US 6,139,998, column 8, line 58 et seq.). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ an antimony-free fire retardant in the adhesive tape, motivated by the desire to achieve a flameproofing effect and environmental safety.

**WITHDRAWAL OF FINALITY**

6. Since claim 4 is not allowable as indicated in the Office Action mailed on 07/30/2003, the examiner feels that the finality of that action should be withdrawn.

**Conclusion**

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (703) 605-4426. The examiner can normally be reached on M,T,Th, F, 8:30-6:00 and on alternating Wednesdays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

HV

DANIEL ZIRKER  
PRIMARY EXAMINER  
GROUP 1900

1700

*Daniel Zunker*